PETERSON, O.F.; KOZLOVA, I.A.; MEL'NIKOVA, L.A.; SIVOSHINSKIY, B.S.

Interaction of smallpox vaccine virus with tissue culture cells. Vop. virus. 9 no.2:154-158 Mr-Ap '64. (MIRA 17:11)

1. Institut virusologii imeni Ivanovskogo AMN SSSR i kafedra meditsinskoy radiologii pri TSentral'nom institute usovershenstvovaniya vrachey, Moskva.

MEL'NIKOVA, I.A.; K[illegible]VA, [illegible]; P[illegible]T[illegible]ON, [illegible]

Synthesis of RNA, labeled [illegible] radioactive [illegible]dine, [illegible] by [illegible]myelitis virus. [illegible] Vir[illegible]. [illegible] no. [illegible] Mr-Ap [illegible] M[illegible]RA [illegible]

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

MEL'NIKOVA, L.A.; KOZLOVA, I.A.

Interaction of a labelled smallpox vaccine virus with the sensitive cell. Vop. virus. 9 no.3:362-364 My-Je '64.

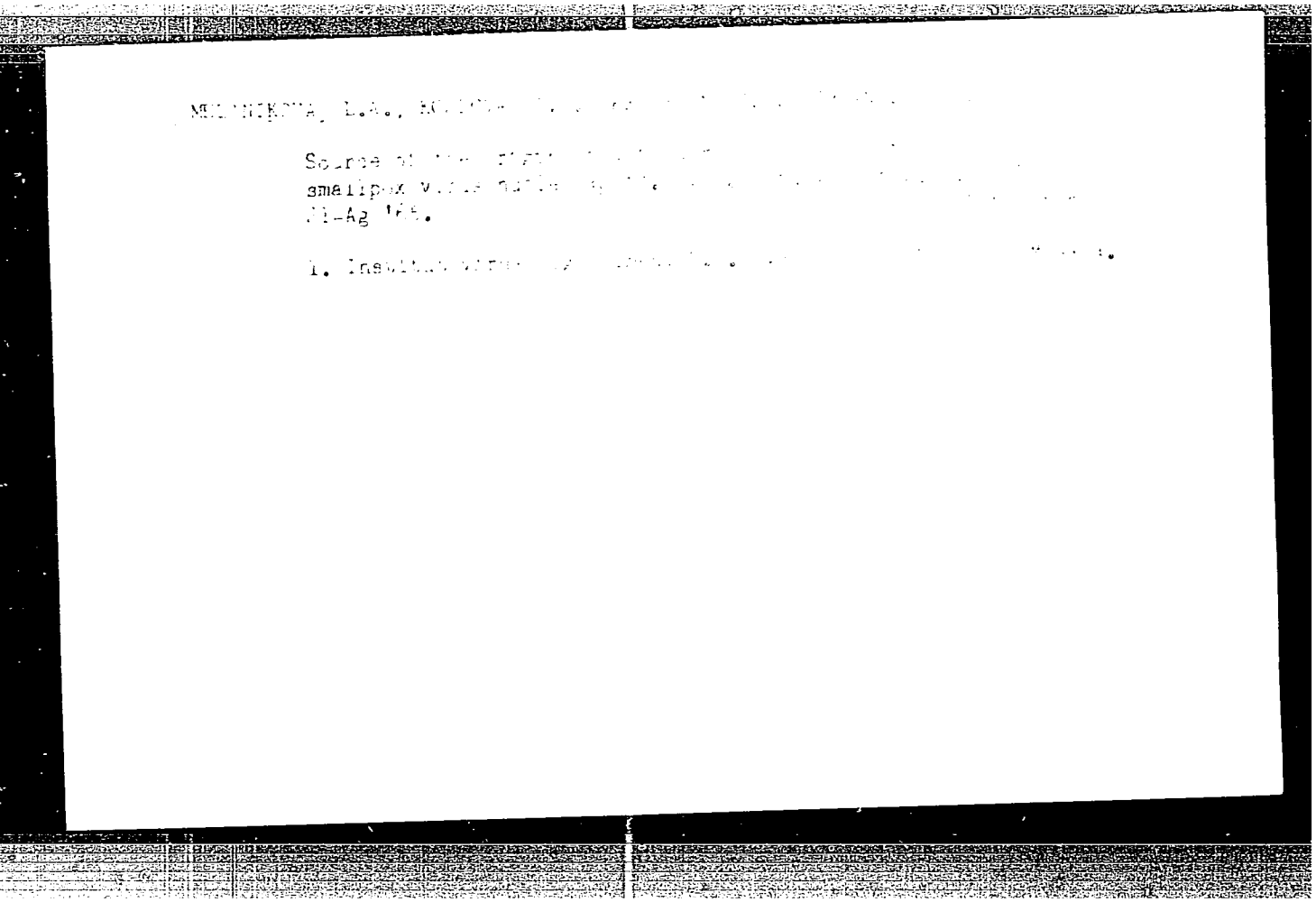
(MIRA 18:1)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

PETERSON, O.P.; MEL'NIKOVA, L.A.; KOZLOVA, I.A.

Determination of the synthesis of poliomyelitis virus antigen by means of I^{131}-labelled gamma globulin. Vop. virus. 10 no.3: 287-289 My-Je '65. (MIRA 18:7)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.



ZHDANOV, V.M.; MEL'NIKOVA, L.A.; KOZLOVA, I.A.; BALANDIN, I.G.; PETERSON, [illegible].P.; MASHARINA, L.

Suppression of the synthesis of smallpox vaccine virus by histone. Dokl. AN SSSR 165 no.5:1182-1183 D '65. (MIRA 19:1)

1. Institut virusologii im. D.I.Ivanovskogo AMN SSSR.
2. Deystvitel'nyy chlen AMN SSSR (for Zhdanov). Submitted August 6, 1965.

L 08558-67 EWT(1) JK

ACC NR: AP6034573 (A,N) SOURCE CODE: UR/0020/66/170/006/1430/1432

AUTHOR: Zhdanov, V. M. (Active member AMN SSSR); Peterson, O. P.; Mel'nikova, L. A.; Kozlova, I. A. 16 B

ORG: Institute of Virology im. D. I. Ivanovskiy, AMN SSSR (Institut virusologii AMN SSSR)

TITLE: Induction of a "stripping" enzyme by various viruses

SOURCE: AN SSSR. Doklady, v. 170, no. 6, 1966, 1430-1432

TOPIC TAGS: enzymology, enzyme, virology, virus, enzyme synthesis

ABSTRACT: Variola viruses produce a compound within the cell called the "stripping" factor which is closely related to the inductive activities of the viruses. Cell fractions of infected cells grown in tissue culture and heat-killed viruses were tested in tissue culture for their deproteinizing and induction properties. The activity of the various strains was analyzed and compared. Variola vaccine strain Dermovaccine had the most active deproteinizing activity and chicken-pox virus the least. Orig. art. has: 1 figure and 1 table. [W.A. 50]

SUB CODE: 06/ SUBM DATE: 14Mar66/ ORIG REF: 001/ OTH REF: 002

Card 1/1

BEREZOVSKIY, V.M.; MEL'NIKOVA, L.M.

Synthesis of thioriboflavin and thio analogs of alloxazine. Trudy VNIVI 8:12-13 '61. (MIRA 14:9)

1. Laboratoriya kofermentov Vsesoyuznogo nauchno-issledovatel'skogo vitaminnogo instituta.
(Riboflavin) (Alloxazine)

BEREZOVSKIY, V.M.; MEL'NIKOVA, L.M.

Alloxazine and isoalloxazine series. Part 3: Synthesis of thioriboflavine and thio analogs of alloxazine. Zhur. ob. khim. 31 no. 11:3827-3831 N '61. (MIRA 14:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Riboflavine) (Alloxazine)

KOVNATSKIY, M.A.; GORN, L.Ye.; GRODZENCHIK, N.A., YERMAKOVA, P.M.; KONIKOVA, G.S.; KORNIGS, A.I.; KUZNETSOVA, M.V.; MEL'NIKOVA, L.A.

Silicosis, etiology, pathogenesis, and clinical aspects. Gig. sanit., Moskva no.8:28-32 Aug 1952. (CIML 23:2)

1. Of the Clinical Department of Leningrad Scientific-Research Institute of Labor Hygiene and Occupational Diseases.

137-58-1-2172

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 1, p 295 (USSR)

AUTHOR: Mel'nikova, L M

TITLE: Clinical Data Relative to Silicosis in Sand Blasters (Materialy k klinike silikoza u peskostruyshchikov)

PERIODICAL: Tr. Yubileyn. nauchn. sessii posvyashch. 30-letney deyat-sti Gos. n.-i. in-ta gigiyeny truda i profzabolevaniy Leningrad, 1957, pp 237-242

ABSTRACT: The effect of working conditions on the health of workers doing sandblasting is studied; special aspects of the clinical picture and the course of silicosis in sand blasters have also been subjected to study.

Ye L

1. Sandblasting--Physiological effects 2. Silicosis--Pathology

Card 1/1

MEL'NIKOVA, L.M.

The been weevil Brushus rufimanus. Zashch. rast. ot vred. i bol. 7 no.9:34-35 S '62. (MIRA 16:8)

1. Belorusskaya sel'skokhozyaystvennaya akademiya.
(White Russia--Beans--Diseases and pests)
(White Russia--Weevils--Extermination)

MAKHOV, Leonid Mikhaylovich; MEL'NIKOVA, Larisa Mikhaylovna;
PAVLOV, Ya.M., otv. red.

[Sections and cuts by inclined projecting planes; methodological manual for a course in mechanical drawing] Secheniia i razrezy naklonnymi proektiruiushchimi ploskostiami; metodicheskoe posobie po kursu mashinostroitel'nogo chercheniia. Leningrad, Leningr. politekhn. in-t im. M.I.Kalinina, 1964. 72 p. (MIRA 18:3)

L 20756-66 EWP(m)/EWA(h)/EWP(k)/EWT(d)/EWT(l)/EWT(m)/ETC(m)-6/EWA(d)/EWP(w)/ EWP(v)
ACC NR: AP6011130 EWA(l) IJP(c) SOURCE CODE: UR/0424/66/000/001/0067/0073
EM/RM

AUTHOR: Brusilovskiy, A. D. (Moscow); Mel'nikova, L. M. (Moscow); Shveyko, Yu. Yu. (Moscow)

ORG: none

48
B

TITLE: Vibration and stability of a cylindrical shell in a gas flow

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 1, 1966, 67-73

TOPIC TAGS: cylindrical shell, shell flutter, flutter speed, shell vibration

ABSTRACT: The flutter of an elastic closed circular cylindrical shell of finite length in a supersonic axial flow of a compressible gas of a certain undisturbed velocity is investigated. An exact solution of the system of equations in displacements which describes the disturbed motion of the shell, with all inertia forces taken into account, is used in determining the flutter velocity of the gas flow and associated vibration parameters. The expressions for aerodynamic component loads acting on the shell are written by using the linear piston theory, and disregarding the effects of the aerodynamic and structural damping, as well as the initial stresses in the middle surface of the shell. The critical Mach numbers at which the flutter occurs are determined, by analyzing the behavior of natural frequenices of the shell in relation to the flow velocity; the corresponding frequencies of the shell are determined by a numerical method in which a parameter is used which accounts for the

Card 1/2

L 20756-66

ACC NR: AP6011130

rigidity of the shell and for aerodynamic quantities. The results of numerical calculation of the minimum flutter velocities for a cylindrical shell with simply supported and clamped faces are given and the effects of support conditions on the shell frequencies, vibration modes, and flutter speeds are discussed and illustrated by diagrams. Orig. art. has: 5 figures, 1 table, and 20 formulas. [VK]

SUB CODE: 20/ SUBM DATE: 02Jul65/ ORIG REF: 008/ ATD PRESS: 4226

Card 2/2

MEL'NIKOVA, L. N.

"Urinary Bladder Changes During Gynecological Diseases." Cand Med Sci, Kuybyshev State Medical Inst, Kuybyshev, 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

MEL'NIKOVA, L.N.

[Modifications of the bladder during gynecological disorders; with atlas] Izmeneniia mochevogo puzyria pri ginekologicheskikh zabolevaniiakh; s atlasom. Kuĭbyshev, Kuĭbyshevskiy gos. med. institut. 1954. 11 p. (MLRA 9:7)
(GYNECOLOGY--ATLASES) (BLADDER)

PUZANOVA, T.A.; MEL'NIKOVA, L.N.

Dermoid cyst of the ovary complicated by perforation into the bladder. Akush.i gin. no.1:72-73 Ja-F '54. (MLRA 7:6)

1. Iz kliniki akusherstva i ginekologii (zaveduyushchiy kafedroy - professor I.T.Mil'chenko) Kuybyshevskogo meditsinskogo instituta.
(Ovaries--Tumors) (Bladder--Perforation) (Cysts)

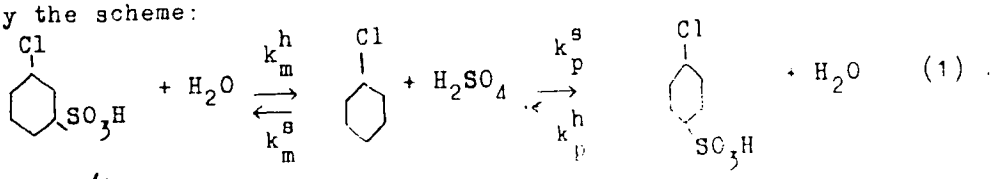
S/153/60/003/004/021/040/XX
B020/B054

AUTHORS: Kachurin, O. I., Spryskov, A. A., Mel'nikova, L. P.

TITLE: Study of the Sulfonation Reaction. LIII. Method of Isotopic Exchange for Studying the Kinetics of Hydrolysis of Chloro-benzene Sulfonic Acids

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4, pp. 669 - 674

TEXT: The present paper continues the series studying the formation, hydrolysis, and isomerization of chloro-benzene sulfonic acids (Refs. 1,2). In weakly concentrated, aqueous-sulfuric acid solutions the system investigated can be illustrated with some simplifications by the scheme:



(1).

Card 1/4

Study of the Sulfonation Reaction. LIII. Method of Isotopic Exchange for Studying the Kinetics of Hydrolysis of Chloro-benzene Sulfonic Acids

S/153/60/003/004/021/040/XX
B020/B054

ASSOCIATION: Ivanovskiy khimiko-tekhnologicheskiy institut, kafedra organicheskoy khimii (Ivanovo Institute of Chemical Technology, Department of Organic Chemistry)

SUBMITTED: September 25, 1958

Card 4/4

'IL'NIKOVA, L.P.

. 'nikova, L.P. "The work of children's and obstetric establishments under unified conditions", Zdravookhraneniye Kazakhstana, 1948, No.5, p. 3-7.

SO: U-3042, 11 March (Letopis 'nykh Statey, No. 7, 1949)

MEL'NIKOVA, I. P.

Mel'nikova, I. P. "Results of the IVth plenum of the Council for Therapeutic and Prophylactic Aid to Children",(Moscow, December 1948), Zdravookhraneniye Kazakhstana, 1949, No. 2, p. 42-43.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

MEL'NIKOVA, L.P.

A case of congenital chondrodystrophy in newborn infant. Akush. i gin. 34 no.4:109-110 Jl-Ag '58 (MIRA 11:9)

1. Iz klinicheskogo rodil'nogo doma No. 2 Alma-Aty.
(DYSCHONDROPLASIA, in inf. & child.
in newborn (Rus))
(INFANT, NEWBORN, dis.
dyschondroplasia (Rus))

MURZALIYEVA, Kh.Ye.; MEL'NIKOVA, L.P.

Work of the gynecological consultation. Vop. okh. mat. i det, 6 no.8: 71-74 Ag '61. (MIRA 15:1)

1. Iz Kazakhskogo meditsinskogo instituta (zav. kafedroy - prof. Kh.Ye. Murzaliyeva) i 2-go rodil'nogo doma (glavnyy vrach L.P.Mel'nikova).
(WOMEN--HEALTH AND HYGIENE)

[illegible]

Title: Electrolytic deposition of zinc-nickel alloy

Source: Sof. zh. Metallurgiya, Abs. 11[illegible]

Publication: Sb. Zashchita met. ot korrozii. Kuybyshev, 1965, 47-52

Topic Tags: zinc containing alloy, nickel containing alloy, electrolytic deposition

Abstract: To obtain clear, bright deposits of Zn-Ni alloy with an Ni content of up to 1% the following electrolyte composition is recommended (in g/liter): ZnSO4--82, NiSO4 0.75--0.[illegible], NaCl 84--94, NaF 71--82; temperature of electrolyte 18--20; D[illegible] 2--3 amp/dm². Data on corrosion experiments have shown that the corrosion stability of Zn-Ni alloy is not lower and, in a number of cases, is higher than the corrosion stability of Zn. [illegible] Volkova [Translation of abstract]

SUB CODE: 11

Card 1/1 [illegible]

UDC: 669.5'14.018.[illegible]

L 8592-65 EWT(1)/T/EEC(b)-3 Pae-2 IJP(c)/SSD/RAEM(1)/ESD(gs)/ESD(t)/RAEM(t)

ACCESSION NR: AR4044044 S/0058/63/000/011/D105/D106

SOURCE: Ref. zh. Fizika, Abs. 11D891

B

AUTHOR: Mel'nikova, L. P.

TITLE: Study of the influence of immersion on the quality of a photographic image

CITED SOURCE: Tr. Vses. n.-i. kinofotoin-ta, vy*p. 50, 1962, 84-93

TOPIC TAGS: immersion, photographic image, photographic printing, film processing, interferometry

TRANSLATION: The immersion method of printing proposed for improvement of the quality of photo- and filmcopies from damaged originals, has definite value also during printing from undamaged originals, inasmuch as their surface is not sufficiently even. Interferometer measurements showed that separate developed grains on the surface of the layer project nonuniformly above it. As theoretical calculations and experimental data of the author show, submersion of a film in the immersion liquid sharply decreases the amount of diffuse light reflected from the surface of the photosensitive layer and the base. Due to this there is an increase in

Card 1/2

L 8592-65

ACCESSION NR: AR4044044

the transparency of the negative and its physical contrast, which leads to improvement of the resolution of small details and an increase of the edge sharpness. In the case of damaged (scratched) orginals, the effectiveness of immersion is greater than in the case of undamaged ones, and based on this distinction it is possible to construct a quantitative method of estimating of wear of film and others originals. The presence of microroughnesses on the surface of the layer also influences the magnitude of the Callier coefficient. This latter, as it turns out, during experimental measurement includes not only the luminous flux scattered by the developed layer, but also the flux scattered by microroughnesses. The removal of microroughnesses with the help of immersion makes it possible to measure the true Callier coefficient, which is less than that measured by the usual methods.

SUB CODE: ES, OP ENCL: 00

Card 2/2

L 22557-65 EWG(j)/EWP(e)/EWT(m)/EPF(c)/EPR/EWP(j)/EWP(b) Pc-4/Pr-4/Ps-4
WW/RM/WH
ACCESSION NR: AP5002188 S/0080/64/037/012/2590/2596

AUTHOR: Karatayev, V. V.; Mel'nikova, L. V.; Reyfman, M. B. B

TITLE: Increasing the gas-impermeability and chemical resistance of graphitic articles

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 12, 1964, 2590-2596

TOPIC TAGS: gas impermeability, chemical resistance, pyrocarbon deposition, graphiting

ABSTRACT: Coating objects with a layer of pyrocarbon obtained by thermal decomposition of hydrocarbons resulted in a deposit with very good gas impermeability--1.5 x 10^{-8} darcy units. Toluene was pyrolysed at 1000-1100C onto the articles in an argon system and the articles were cooled at less than 10 degrees per minute. Higher pyrolysis temperatures resulted in poor adhesion between the deposit and the substrate. Although up to 0.2 mm thick deposits were obtainable, even thin layers (100 micrometers) of the pyrocarbon were resistant to agressive melts such as silicon heated to 1700C. The Si reacted with the pyrocarbon layer, forming a SiC phase at the boundaryat the rate of 3 x 10^{-3} gm/cm^2. hr. When these crystals attained a length of about 3 mm they separated from the

Card 1/2

L 22557-65
ACCESSION NR: AP5002188

crucible wall and crystallized in a cooler section. Orig. art. has: 4 figures and 1 table

ASSOCIATION: None

SUBMITTED: 03Dec62 ENCL: 00 SUB CODE: GC, IC

NR REF SOV: 004 OTHER: 007

Card 2/2

PHASE I BOOK EXPLOITATION SOV/4164

Vsesoyuznoye soveshchaniye po splavam redkikh metallov. 1st, Moscow, 1957

Redkiye metally i splavy; trudy... (Rare Metals and Alloys; Transactions of the First All-Union Conference on Rare-Metal Alloys) Moscow, Metallurgizdat, 1960. 438 p. 3,150 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Institut metallurgii; USSR Komissiya po redkim metallam pri nauchno-tekhnicheskom komitete.

Ed.: I.K. Shapovalov; Ed. of Publishing House: O.M. Kamayeva; Tech. Ed.: P.G. Islent'yeva.

PURPOSE: This collection of articles is intended for metallurgical engineers, physicists, and workers in the machine-building and radio-engineering industries. It may also be used by students of schools of higher education.

COVERAGE: The collection contains technical papers which were presented and discussed at the First All-Union Conference on Rare-Metal Alloys, held in the Institute of Metallurgy, Academy of Sciences USSR in November 1957. Results of investigations of rare-metal alloys, titanium, and copper-base alloys with additions of rare metals are presented and discussed along with investigations of rhenium, vanadium, niobium, and their alloys. The effect of rare-earth metals on properties of magnesium alloys and steels is analyzed. The uses of rhenium as a dehydrating catalyst, electroplating material, and material suitable for making plugs for automobile electrical systems are discussed. Also, the effect of the addition of certain elements on the properties of heat-resistant steel is examined and alloys with special physical properties (particularly semiconductive alloys) are discussed. No personalities are mentioned. Soviet and non-Soviet references accompany some of the articles.

PART II. TITANIUM, AND COPPER-BASE ALLOYS WITH RARE-METAL ADDITIONS

Rare Metals (Cont.) SOV/4164

PART III. RHENIUM, VANADIUM, NIOBIUM, ZIRCONIUM AND ALLOYS BASED ON THEM

Card 4/8

L 2101-66 EWT(m)/EPF(c)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/WB
ACCESSION NR: AP5022637 UR/0089/65/019/002/0177/0178
669.018:669.87:621.039.573

AUTHOR: Kiknadze, G. I.; Zakharov, D. M.; Mel'nikova, L. V.

TITLE: The corrosion resistance of 1Kh18N9T stainless steel and VTI-1 titanium in indium-gallium alloy

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 177-178

TOPIC TAGS: stainless steel, titanium, indium alloy, gallium containing alloy, steel corrosion, titanium corrosion, liquid alloy/1Kh18N9T steel, VTI 1 titanium

ABSTRACT: In connection with the building of the RK-II indium-gallium loop at the Institute of Physics, Academy of Sciences Georgian SSR, an investigation was made of the corrosion and erosion behavior of 1Kh18N9T stainless [AISI 321] steel and VTI-1 commercial-grade titanium in a liquid eutectic In-Ga alloy containing 20.5 wt% In and 79.5 wt% Ga. It was found that under conditions of static immersion, the steel did not react with the In-Ga alloy at temperatures up to 250C. But at 320C, an intense chemical interaction between the stainless steel and alloy components resulted in the formation of two layers of intermetallic compounds on the steel surface. The outer layer consisted of a very brittle $FeGa_4$ compound with a bcc lattice (a = 8.36 kX), and the second layer, of an Fe-In compound with a bcc lattice

Card 1/2

L 2101-66

ACCESSION NR: AP5022637

3

(a = 9.14 kX), which adhered rather strongly to the base metal. The welded joints of 1Kh18N9T steel were less stable than the parent metal and were corroded at 220—250C. VTI-1 titanium parent metal and welds did not react with the In-Ga alloy at temperatures up to 350C. But at 400C, a titanium-indium compound (a γ-phase) with a simple cubic lattice (a = 4.22 Å) was formed on titanium. Also, a small quantity of a Ti_3Ga intermetallic compound with a hexagonal lattice (a = 5.75 Å, C = 4.64 Å) was formed as a result of the interaction of the γ-phase and gallium. An oxide film with a rutile structure or a hydride film on the titanium surface substantially improves corrosion resistance in the In-Ga alloy. Circulating In-Ga alloy at a speed of 10 m/sec produced no erosion of the steel or titanium. However, it promoted their corrosion by lowering the temperature of the beginning of corrosion, e.g., to below 100C for steel welds and to 300C for titanium and titanium welds. In all cases, however, VTI-1 titanium was much more resistant to corrosion in a liquid In-Ga alloy, and should be preferred as a structural material for indium-gallium loops. [MS]

ASSOCIATION: none

SUBMITTED: 22Apr65 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4113

Card 2/2

L 3591-66 EWI(m)/EPF(c)/ETC/EPF(n)-2/EWP(t)/EWP(b)/EWG(m) IJP(c) JD/WW

ACCESSION NR: AP5022638 UR/0089/65/019/002/0178/0178
669.018:668.87:621.039.573

AUTHOR: Kiknadze, G. I.; Desipri, A. I.; Zakharov, D. M.; Mel'nikova, L. V. 36 B

TITLE: Indium-gallium alloy as a γ-carrier for radiation circuits

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 178

TOPIC TAGS: reactor, carrier, gamma carrier, radiation circuit, indium gallium alloy, indium, gallium

ABSTRACT: The Institute of Physics, Georgian Academy of Sciences, has used an In-Ga alloy containing 24.5 wt% In as a γ-carrier for the radiation circuit of an IRT-2000 reactor. After 1000 hr operation it was found that the In content in the alloy decreased by 2 wt%. An indium-base solid phase was found in the circuit joints. Thus, In-Ga alloy with 24.5 wt% In is unstable and contains excessive In. Laboratory tests and tests under production conditions with another alloy containing 22.5% In produced similar results. Only alloy with 20.5 wt% In was found to be suitable as a γ-carrier for radiation circuits at temperatures as low as 13C. This alloy has a viscosity of $2.5 \cdot 10^{-2}$ P at room temperature and a density of 6.3 g/cm^3. [WW]

ASSOCIATION: none

Card 1/2

L 3591-66

ACCESSION NR: AP5022638

SUBMITTED: 22Apr65 ENCL: 00 SUB CODE: MM, NP

NO REF SOV: 001 OTHER: 000 ATD PRESS: 4114

Card 2/2 mlr

ACC NR: AT7004

SOURCE CODE: UR/0000/66/000/000/0178/0190

AUTHOR: Andreyeva, V. V.; Glukhova, A. I.; Dontsov, S. N.; Moiseyeva, I. S.; Mel'nikova, L. V.

ORG: none

TITLE: Corrosion resistance, electrochemical and mechanical properties, and microstructure of niobium-tantalum alloys

SOURCE: AN SSSR. Institut fizicheskoy khimii. Korroziya i zashchita konstruktsionnykh splavov (Corrosion and protection of structural alloys) Moscow, Izd-vo Nauka, 1966, 178-190

TOPIC TAGS: niobium base alloy, tantalum containing alloy, mechanical property, corrosion resistant alloy, recrystallization temperature

ABSTRACT: A series of niobium-tantalum alloys containing 0.24—30.1% of tantalum were cast into ingots and some were forged into bars (7 x 7 mm). To determine the temperature of recrystallization, some of the specimens were annealed for 2 hr at various temperatures. It was found that an increase in tantalum content increases the recrystallization temperature. In specimens containing about 1% tantalum, recrystallization started at 1100C and ended at 1200C, while in those containing 30% tantalum it started at 1200C and ended at 1300C. An increase in tantalum content also increases the strength and ductility of the alloys. For instance,

Card 1/2

UDC: none

ACC NR: AT7004170

an increase of tantalum content from 0.24% to 19.8% in forged specimens resulted in an increase in tensile strength from 607 to 764 Mn/m^2 and elongation from 18 to 25%. It was also found that the tensile and yield strengths of hot-forged specimens were considerably higher than those of specimens annealed at 1250C for 2 hr. This indicates that there was not sufficient time for recrystallization during forging at 800—1200C. Corrosion tests of niobium, tantalum and niobium-tantalum alloys were carried out in various solutions of sulfuric, hydrochloric and nitric acids. It was found that the corrosion rate of the alloys decreases with increased tantalum content. For instance, the corrosion rate of an alloy containing 5% tantalum in a 40% solution of sulfuric acid was 0.09 $g/m^2.hr$, while that of an alloy containing 30% tantalum was 0.01 $g/m^2.hr$. Alloys containing not less than 5% tantalum were found to be completely corrosion-resistant in a 20% solution of hydrochloric acid. This high corrosion-resistance of niobium-tantalum alloys is due to the presence of a protective film of mixed tantalum and niobium oxides, such as Ta_2O_5 and Nb_2O_5. Orig. art. has: 7 figures and 1 table. [TD]

SUB CODE: 11,20/ SUBM DATE: 27Sep66/ ORIG REF: 006/ OTH REF: 003/ ATD PRESS: 5115

Card 2/2

MEL'NIKOVA, M.A.

Unusual case of hymenolepiasis nana in child. Med. paraz. i paraz. bol. no.4:357 O-D '54. (MLRA 8:2)

(TAPEWORM INFECTION, in infant and child,
Hymenolepis nana, case report)

MEL'NIKOVA, M A.

Epidemiology

On 27-29 November 1957, a Scientific Conference of Problems of Theoretical Epidemiology and Ways and Means of Eliminating Epidemic Diseases was held in Kiev in honor of the 70th year of one of the founders of Soviet epidemiology, Prof. L. V. Gromashevskiy. The following scientist participated in the conference:

MEL'NIKOVA, M. A. (Riazan') read a paper entitled "The Clinico-epidemiological Features of Typhoid in Riazan' in Recent Years According to the Bacterial Phagotype".

SO: ZhMEI, Vol 29, No 5, 1958, Uncl.

MEL'NIKOVA, M.A.

Cases of diphtheria complicated by polyneuritis. Zdrav. Kazakh. 21 no.1:62-65 '61. (MIRA 14:3)

1. Iz kafedry detskikh infektsionnykh bolezney (zav. - dotsent T.N. Nikonova) Kazakhskogo meditsinskogo instituta i iz 2-oy detskoy infektsionnoy bol'nitsy g. Alma-Aty.
(DIPHTHERIA) (NEURITIS, MULTIPLE)

"Combined Use of Radioactive Phosphorus and Calcium by Food Plants," by S. S. Shain, Doctor of Agricultural Sciences; V. M. Kashmanova; M. A. Mel'nikova; and A. V. Motova, All-Union Scientific Research Institute of Fodder imeni V. R. Vil'yams, Doklady Vsesoyuznoy Ordena Lenina Akademii Sel'skokhozyaystvennykh Nauk imeni V. I. Lenina, No 1, 1957, pp 15-23

A number of experiments were conducted to establish, the interrelationship between the use of nutritive substances by food plants when sown in pure form and in mixed form. Radioactive phosphorus and calcium absorbed through root systems were used for this purpose.

Results indicated that the phosphorus and calcium that were absorbed by the roots were partially secreted into the soil and became accessible to the surrounding plants of the same or of different species. A part of the food substances absorbed by the various plants, was secreted from the root system and served as food for both the various microorganisms and for the adjoining plants of various species. The intimate intertwining of roots of grasslike plants in the soil evidently is significant not only for the improved use by plants of nutritive substances from the soil, but also for a more complete reciprocal use of root secretions. (U)

SHAIN, S.S.,doktor sel'skokhozyaystvennykh nauk, professor; KASHMANOVA, V.M. aspirant; MEL'NIKOVA, M.A., aspirant; MOTOVA, A.V., aspirant.

Correlation between forage plants in nutrient utilization. Nauka i pered.op. v sel'khoz. 7 no.2:47-50 F '57. (MLRA 10:3)
(Forage plants) (Plants--Nutrition)

SHAIN, S.S., doktor sel'skokhozyaystvennykh nauk; KASHMANOVA, M.A.; MEL'NIKOVA, M.A.; MOTOVA, A.V.

Simultaneous use of radioactive phosphorus and calcium by forage plants. Dokl.Akad.sel'khoz.22 no.1:15-23 '57. (MLRA 10:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov imeni V.R. Vil'yamsa. Predstavlena akademikom M.A.Ol'shanskim.
(Forage plants) (Phosphorus) (Calcium)

SHAIN, S.S., doktor sel'skokhozyaystvennykh nauk; MEL'NIKOVA, M.A.

Space arrangement for legumes and grasses sown in mixtures within field crop rotations. Dokl.Akad.sel'khoz. 21 [i.e.23] no.12:9-15 '58. (MIRA 12:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov imeni V.P.Vil'yamsa. Predstavleno akademikom I.V.Larinym.
(Legumes) (Grasses) (Plants, Space arrangement of)

MEL'NIKOVA, M.A.; TITOVA, A.V.

Effect of rotary snow removers on park plantings. Gor. khoz. Mosk. 37 no.7:45 Jl '63. (MIRA 16:11)

[illegible], [illegible]

[illegible]. [illegible]oderzhanie [illegible] a [illegible] [illegible] [illegible] [illegible] [illegible]. Kirov, 195[illegible]. [illegible]s. 20sm [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible]. 1[illegible]. [illegible] [illegible].-(5[illegible]-[illegible])

[illegible]: [illegible] Letopis', [illegible]ol. 1, 1[illegible]

CHAUSOV, Nikita Semenovich, kand.tekhn.nauk; Prinimali uchastiye:
GVOZDIKOV, B.F., inzh.-elektrik; KULAKOV, B.F., inzh.-elektrik;
SBORSHCHIKOV, S.G., inzh.-elektrik; PUKHLYANKO, A.A., inzh.-elektrik;
KORNEYEVA, V.P., tekhnik-elektrik; AYNBERG, V.D., programmist; MEL'NIKOVA,
M.G., programmist; KOZLOVA, R.Ya., programmist; ARKHIPOVA, A.A., programmist
VILKOV, G.N., red.izd-va; MOCHALINA, Z.S., tekhn.red.

[Using electronic computers in calculating engineering constructions
(programming the calculation of shallow shells and beams for the electronic
digital computer "Ural-1")] Primenenie elektronnykh vychislitel'nykh
mashin pri raschete inzhenernykh sooruzhenii (programmirovanie rascheta
pologikh obolochek i sterzhnei dlia ETsVM "Ural-1"). Moskva, Gos.izd-vo
lit-ry po stroit., arkhit.i stroit. materialam, 1962. 135 p. (Akademiia
stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruktsii.
Trudy, no.9). (MIRA 15:8)
(Electronic digital computers) (Elastic plates and shells)
(Beams and girders)

KRIVISSKIY, Aleksandr Mikhaylovich, kand. tekhn. nauk; TELYAYEV, P.I., nauchnyy sotr.; MEL'NIKOVA, M.G., nauchnyy sotr.; DEBERDEYEV, B.S., red.; BODANOVA, A.P., tekhn. red.

[Design and analysis of flexible pavements for local limiting equilibrium] Konstruirovanie i raschet nezhestkikh dorozhnykh odezhd po mestnomu predel'nomu ravnovesiiu. Moskva, Avtotransizdat, 1963. 75 p. (Pavements) (MIRA 16:5)

PRZHIYALGOVSKAYA, N.M.; SHNER, V.F.; MEL'NIKOVA, M.I.; BELOV, V.N.

Reduction of esters of 2,3-naphtholcarboxylic acid to esters of 2,3-tetralonecarboxylic acid. Zhur.ob.khim. 33 no.2:635-637 F '63. (MIRA 16:2)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni D.I. Mendeleyeva.

(Naphthoic acid) (Naphthalenone)

MEL'NIKOVA, M. K.

Meteorological Abst.
Vol. 4 No. 11
Nov. 1953
Meteorological
Observations and
Instruments

4.11-55 551.508.72

Deriagin, B. V. and Mel'nikova, M. K., Membraunyi gigrometr i primenenie ego diia opredeleniia otnositel'noi vlazhnosti vozdukha. [A membrane hygrometer and its application to determination of relative humidity.] Meteorologiia i Gidrologiia, No. 5:54-58, 1952. 4 figs., 5 refs., 11 eqs.

DLC--Description of a new instrument constructed on the principle of water vapor diffusion through a porous diaphram. Previous investigations reviewed. Critical remarks on the work of W. FINDEISEN, A. SPECIER-GREGORY, and S. ROURKE included. The testing of the new hygrometer showed great accuracy and can be recommended for humidity observations.

Subject Heading: 1. Hygrometers,--N.T.Z. EH 5/21/54

MEL'NIKOVA, N.K.

4-
(3)

The effective magnitude of the spreading angle during imbibition of porous bodies and a method for its evaluation. B. V. Deryagin, M. K. Mel'nikova, and V. I. Kryilova. *Colloid J. (U.S.S.R.)* 14, 459–63(1952)(Engl. translation). —See *C.A.* 47, 3082*c*.

H. L. H

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

9-2-54

MEL'NIKOVA, M. K

DERYAGIN, B. V., KOLYASEV, F. YE., AND MEL'NIKOVA, M. K.

Principal Laws Governing the Movement of Water in Soil Under Various Wetting

The authors generalize the problems developed in an earlier published work of theirs (Gidrotekhnika i melioratsiya, No. 2, 1950), and also present some new information. They give values of the "kinetic" specific surface of certain grounds and soils (determined by V. I. Krylova by measuring the resistance to movement of gases through them). They consider the earlier proposed equation for the determination of the velocity of motion of the wetting front (B. V. Deryagin, Kolloid. zhur. 8, No. 1-2, 1946), based on the empirical connection of Kozeny between permeability and porosity and on the assumption concerning the complete filling by liquid of the region behind the moving wetting front. The quantity "capillary motion" at the front of wetting is expressed by means of "kinetic" specific surface, and not by meniscus radius (as done earlier). (RZhGeol, No. 4, 1955) Sb. tr. po agron. fizike, No. 6, 1953, 170-181.

SO: Sum. No. 744,8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

MELNIKOVA, M. K., ZOVAYEVA, N. N., DRYAGIN, B. V., and NERPIN, S. V. (USSR)

"Theory of equilibrium and migration of soil moisture at various contents."

report submitted for the [illegible] Int. Congress of Soil Science
Paris, France
28 August 1956

MEL'NIKOVA, M.K.; MERPIN, S.V.

A study of equilibrium conditions of moisture in dispersion systems in the presence of a gravitational field. Dokl.AN SSSR 106 no.4: 615-618 F '56. (MLRA 9:6)

1.Predstavleno akademikom A.F.Ioffe.
(Fluid mechanics) (Capillarity)

USSR/Soil Science - Physical And Chemical Properties of Soil. J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86736

Author : Mel'nikova, M.K.

Inst : AS USSR

Title : Movement Through the Soil of Moisture Accessible to Plants during Vegetation and Moisture-Charging Waterings.

Orig Pub : V sb.: Byul. osnovy oroshayem. zemled. M., AN SSSR 1957, 670-679

Abstract : In the stratified grounds typical of the soils at the engels Experimental-Meliorative Station, a portion of the irrigation waters "is suspended" in the boundary of the sandy layer, strewn under the loesslike loams at varied (from 5 to 10 meters) depths, which in certain cases brings about the occurrence of a horizon with high moisture occurs at a moisture content considerably Moisture runoff occurs

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USSR/Soil Science - Physical and Chemical Properties of Soil. J

Abs Jour : Ref Zhur Biol., No 19, 1958, 86736

at a moisture content considerably less than the field moisture capacity, whereupon the moisture tends to uniform distribution in the profile of the soil-ground mass. The vegetation of plants reduces the losses in deep seepage, since the root drying zone created by the plants prevents the loss of moisture from the root-inhabited horizons. Observations of the dynamics of moisture in deep horizons show that moisture runoff lasts a long while. When determining the field moisture capacity of irrigated soils especially, observations of the moisture content of the soils should, therefore, be made not less than 20 to 25 days. The depth of drilling must at the same time be set in accordance with local conditions and the characteristics of the soil-ground mass. -- M.K. Mel'nikova

Card 2/2

VERSHININ, Petr Vasil'yevich; MEL'NIKOVA, Mariya Konstantinovna; MICHURIN, Boris Nikolayevich; MOSHKOV, Boris Sergeyevich; POYASOV, Nikolay Petrovich; CHUDNOVSKIY, Abram Filippovich, prof.; IOFFE, A.F., akademik, red.; REVUT, I.B., kand.sel'skokhoz.nauk, red.; ORLOVA, L.I., red.; POL'SKAYA, R.G., tekhn.red.

[Principles of agricultural physics] Osnovy agrofiziki. Moskva, Gos.izd-vo fiziko-matem.lit-ry, 1959. 903 p. (MIRA 13:2)
(Agricultural physics)

NERPIN, S.V.; MEL'NIKOVA, M.K.

Erroneous theory of the movement of soil moisture. Pochvovedenie no.2:71-75 F '60. (MIRA 15:7)

1. Agrofizicheskiy institut Vsesoyuznoy Akademii sel'skokhozyayastvennykh nauk imeni Lenina.

(Soil moisture)

NERPIN, S.V., GLOBUS, A.M., MELNIKOVA, M.K.

"The thermodhynamics and kinetics of soil moisture; experimental testing of the theory with radio ctive traces."

Report submitted to the Symposium on Radioisotopes in Soil plant Nutrition Studies, Bombay Feb 26 to March 2 1962

NERPIN, S.V., red.; MEL'NIKOVA, M.K., red., CHUDNOVSKIY, A.F., red.; REVUT, I.B., red., STEPANOV, L.N., red.; POYASOV, N.P., red.

[Collection of papers on study methods in the field of soil physics] Sbornik rabot po metodike issledovanii v oblasti fiziki pochv. Leningrad, Agrofizicheskii nauchno-issl. in-t, 1964. 320 p. (MIRA 17.12)

1. Soveshchaniye po koordinatsii i metodike nauchno-issledovatel'skikh rabot v oblasti fiziki pochv, Leningrad. 2. Agrofizicheskiy nauchno-issledovatel'skiy institut, Leningrad (for all except Nerpin).

MEL'NIKOVA, M.K., PROKHOROV, V.M.

Diffusion of cations in an air-dry soil. Kolloid. zhur. [illegible]
411 My-Je '65.

1. Agrofizicheskiy nauchno-issledovatel'skiy institut, Leningrad.
Submitted March 25, 1964.

L 08453-67 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD

ACC NR: AP6030896 SOURCE CODE: UR/0080/66/039/008/1693/1696

AUTHOR: Mel'nikova, M. K.; Prokhorov, V. M.

ORG: Agrophysical Scientific Research Institute (Agrofizicheskiy nauchno-issledovatel'skiy institut)

TITLE: Effect of a wetting agent on the adsorption and desorption of Sr^{90} by the soil

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 8, 1966, 1693-1696

TOPIC TAGS: radiostrontium, adsorption, desorption, sorption, surface active agent

ABSTRACT: In connection with the extensive industrial use of surfactants, their effect on the adsorption of radioisotopes, in particular, the harmful Sr^{90} nuclide, was studied. The common detergent OP-7 (polyethylene glycol of octylphenol with 7 ethylene glycol groups) was chosen for the experiments. The adsorption of Sr^{90} was investigated under static conditons, and the desorption under dynamic conditions by washing the columns containing the soil with various solutions. It was found that the desorption of Sr^{90} under the influence of $Ca(NO_3)_2$ and Trilon B solutions is improved by the presence of OP-7. At a high salt concentration of the washing solution, the effect of adding OP-7 is less pronounced. The distribution coefficient of Sr^{90} in moist soil in the presence of OP-7 either increases or retains its previous value. The data obtained may prove useful in increasing the effectiveness of desorbing solutions in the regeneration of mineral sorbents used for absorbing microquantities of ions, or in

Card 1/2 UDC: 532.696.1+541.183

L 08453-67

ACC NR: AP6030896

increasing their adsorption by these sorbents. Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 24Feb64/ ORIG REF: 002

Card 2/2

USSR/Human and Animal Physiology - The Nervous System. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 13260

Author : Razumov, N.P., Okhnyanskaya, I.G., Osipova, V.G., Mel'nikova, M.M., Kozlov, L.A., Vakar, M.D.

Inst : State Scientific Research Institute of Labor and Union Hygiene

Title : Changes in the Higher Nervous Activity of Patients with Silicosis

Orig Pub : Tr. Yubileyn. nauchn. sessii, posvyashch. 30-letney deyat-sti Gos. n.-i. in-ta gigiyeny truda i profzabolevaniy. L., 1957, 215-221

Abstract : An investigation of conditioned and unconditioned vascular and static reflexes and a determination of sensitivity of visual, auditory, cutaneous, gustatory, and olfactory analysors in patients with silicosis

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USSR/Human and Animal Physiology - The Nervous System. T

Abs Jour : Ref Zhur Biol., No 3, 1959, 13257

corresponded to restoration of the tendon reflex as a result of therapy. In the investigation in 45 patients of conditioned motor reactions with verbal support there was observed a weakening of the basic cortical processes (slow formation, instability of positive and inhibitory conditions of the reaction, disturbance of mobility and strength of the condition). Threatment with bismuth carbonate, pachycarpine, or glutanic acid enhanced the cortical neurodynamics and trophicity of the muscles. -- K.S. Ratner

Card 2/2

MEL'NIKOVA, M.M. (Moskva)

Morphological changes in the central nervous system in experimental silicosis. Gig.truda i prof.zab. 1 no.3:14-19 My-Je '57. (MIRA 11:1)

1. Institut gigiyeny truda i profzabolevaniy AMN SSSR i kafedra profzabolevaniy TSentral'nogo instituta usovershenstvovaniya vrachey.
(NERVOUS SYSTEM--DISEASES)
(LUNGS--DUST DISEASES)

MEL'NIKOVA, M. M.

Cand Med Sci - (diss) "Clinico-experimental materials on the state of the nervous system in silicosis." Moscow, 1960. 14 pp; (Academy of Medical Sciences, Inst of Labor Hygiene and Vocational Disorders); 300 copies; price not given; (KL, 10-61 sup, 225)

ANTONOVA, L.T.; MARTYNOVA, A.P.; MEL'NIKOVA, M.M. (Moskva)

State of health of workers in capron fiber plants. G'g. truda i prof. zab. 4 no.12:39-41 D '60. (MIRA 15:3)

1. TSentral'nyy institut usovershenstvovaniya vrachey, Institut gigiyeny truda i professional'nykh zabolevaniy AMN SSSR.
(NYLON—HYGIENIC ASPECTS)

MEL'NIKOVA, M.M.

Clinical and morphological changes in the nervous system in silicosis. Sov.med. 24 no.11:69-73 N '60. (MIRA 14:3)

1. Iz instituta gigiyeny truda i profzabolevaniy AMN SSSR i kafedry profbolezney TSentral'nogo instituta usovershenstvovaniya vrachey, Moskva.

(LUNGS—DUST DISEASES)

AFTONOVA, L.T.; KURLYANDSKIY, B.A.; MEL'NIKOVA, M.M.; SMIRNOVA, M.I.
(Moskva)

State of the health of workers engaged in the production of caprolactam from benzene. Gig. truda i prof. zab. 6 no.5:14-17 My'62. (MIRA 16:8)

1. TSentral'nyy institut usovershenstvovaniya vrachey.
(INDUSTRIAL HYGIENE) (CYCLOHEXANE—TOXICOLOGY)

SOV/137-59-3-7196

Translation from Referativnyy zhurnal Metallurgiya, 1959, Nr 3, p 32 (USSR)

AUTHORS: Kudryavtsev, N T , Melnikova, M M

TITLE Electrolytic Deposition of Titanium From Aqueous Solutions of Its Salts (Elektroliticheskoye osazhdeniye titana iz vodnykh rastvorov yego soley)

PERIODICAL: Vestn tekhn i ekon inform Mezhotrasl labor tekhn-ekon issled i nauchno-tekhn inform N-i fiz-khim in-ta im L Ya Karpova, 1958, Nr 1 (6) pp 21-22

ABSTRACT: A survey The authors describe work on the deposition of Ti from aqueous solutions, beginning with work carried out in 1901 (deposition from organic materials in concentrated HCl); work on separation of Ti from Ti tartarate or mixed Ti-K oxalates and from a solution of Ti acid in water saturated with O_2; patented [proprietary] methods for separation from boron-fluoride electrolytes with addition of NH_3 and glue, from Ti^{3+} solutions in an alkaline electrolyte with addition of organic compounds; and work on the separation of Ti alloys (Cd-Ti alloy)

Card 1/1 M F

AUTHORS: Kudryavtsev, N. T., Mel'nikova, M. M. SOV/156-[illegible]

TITLE: Electrolytic Production of Hard Iron Deposits From a Boron-Fluorine-Hydrogen Electrolyte (Elektroliticheskoye polucheniye tverdykh osadkov zheleza iz borftoristovodorodnogo elektrolita)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Khimiya i khimicheskaya tekhnologiya, 1958, Nr 1, pp. 173 - 175 (USSR)

ABSTRACT: Electrolytes for iron plating are usually divided into 2 main groups: a) cold and b) hot ones. These two differ strictly as regards process rate. The authors have tried to choose such an electrolyte composition as would be not only independent of temperature, storage time, and duration of electrolysis, but would also give sufficiently hard iron deposits even at comparatively high current densities without heating of the electrolyte. As a result of the experiments a solution of $Fe(BF_4)_2$ and boric acid with a pH of 3 - 3,6 has been chosen.

The electrolyte has good buffer properties in the range of pH = 3 - 4 which are further increased by an addition of boric acid. Besides, this electrolyte is very resistant against oxidation, most when containing 300 g/l of the mentioned iron

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salt. It gives good results as regards both quality of cathodic iron deposits and process rate. The change of iron concentration is of little influence upon the deposit quality within the admissible current density limit. A compact deposit of about 50-100μ thickness is formed with increasing iron concentration, and with the rise of temperature (Table 1) The iron coating adheres firmly to the base metal, its color changing from dark grey to silvery white with rising temperature. The pH value of the electrolyte considerably influences the quality of the coating, which will become dark and brittle for high pH ($\rangle$ 4,5), and bright and soft for pH values from 2 to 3, the yield (as related to current), however, decreasing considerably. At a pH $\sim$ 1,5 - 1 no iron but hydrogen is deposited on the cathode. On the basis of these experiments, the following electrolyte composition is recommended: $Fe(BF_4)_2$ 300 g/l, H_3BO_3 18 g/l, HBF_4(free) 1-2 g/l, pH= 3,2 -3,6, temperature 20 - 60°. Current density at the cathode 2-12 Amps/squ.dm according to electrolyte temperature.

Electrolyte Production of Hard Iron Deposits From a Boron-Fluorine-Hydrogen Electrolyte SOV/156-58-1-32/46

There are 3 tables and 2 Soviet references.

ASSOCIATION: Kafedra tekhnologii elektrokhimicheskikh proizvodstv Moskovskogo khimiko-tekhnologicheskogo instituta im.D.I.Mendeleyeva (Chair of Electrochemical Production Technology of the Chemical Engineering Institute imeni D.I.Mendeleyev, Moscow)

SUBMITTED: September 25, 1957

Card 3/3

VISHENKOV, Semen Arkad'yevich; MEL'NIKOVA, M.M., red.; TEMKINA, B.Ya., otv. za vypusk; SUKHAREVA, R.A., tekhn.red.

[Increasing the wear resistance of parts by chemical nicket coating] Povyshenie iznosostoikosti detalei khimicheskim nikelirovaniem. Moskva, 1959. 59 p. (Moskovskii Dom nauchno-tekhnicheskoi propagandy. Peredovoi opyt proizvodstva. Seriia: Progressivnaia tekhnologiia mashinostroeniia, vyp.5) 59 p. (MIRA 13:9)
(Protective coatings) (Nickel plating)

TROITSKAYA, V. A., MELNIKOVA, M.

"On characteristic intervals of pulsations diminishing by periods (IPDP) in the electromagnetic field of the earth and their connection with phenomena in the high atmosphere."

report presented at the Intl. Association of Geomagnetism and Aeronomy, Symposium on Rapid Geomagnetic Variations, Utrecht, Netherlands, 1-4 Sep 59.

S/081/60/000/007/007/012
A006/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 7, p. 348, # 27349

AUTHORS: Kudryavtsev, N. T., Golovchanskaya, R. G., Mel'nikova, M. M.

TITLE: Electrochemistry of Titanium

PERIODICAL: Tr. Mosk. khim-tekhnol. in-ta, im. D. I. Mendeleyeva, 1959, No. 26, pp. 128-136

TEXT: This is a review of the following problems: properties of Ti; standard Ti potential; H_2 overvoltage on Ti; electrolytes used for deposition of Ti and its alloys (aqueous solutions of salts). There are 23 bibliographical titles.

M. M.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

Mel'nikova, M.M.

S/137/60/000/006/011/015
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 6, p. 321, # 14014

AUTHORS: Kudryavtsev, N.T., Golovanskaya, R.G., Mel'nikova, M.M.

TITLE: Electrochemistry of Titanium

PERIODICAL: Tr. Mosk. khim.-tekhnol. in-ta im. D. I. Mendeleyeva, 1959, No. 26, pp. 128 - 136

TEXT: The authors discuss the electrochemical properties and conditions of electrolytic deposition of titanium. There are 23 bibliographical titles.

L.A.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

34383

S/539/61/000/032/012/017
D204/D301

1.18CO

AUTHORS Kudryavtsev, N.T., Mel'nikova, M.M. and Falanker, V. Sh

TITLE The cathode process in the electrodeposition of a Fe-Cr alloy from a borofluoride electrolyte

SOURCE Moscow. Khimiko tekhnologicheskiy institut. Trudy, no. 32, 1961. Issledovaniya v oblasti elektrokhimii, 278-282

TEXT Electrodeposition was studied from an electrolyte containing $Fe(BF_4)_2$, $Cr(BF_4)_3$ and HBF_4 with known contents of Cr^{2+} and Cr^{3+}. A constant concentration of Cr equal to 3 5% of the total, was set up by passing a current of density 10 amp/dm^2 for 1 hour before each experiment. The cell used allowed estimation of the current consumed for the discharge of H_2 and for the alloy. The influence of $Cr(BF_4)_3$ and $Fe(BF_4)_2$ concentrations on the composition and current efficiency of the deposit was investigated, as well as that of HBF_4 content, temperature and cathode current density D_k. It was found that the deposits were dark and

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S/539/61/000/032/012/017
D204/D301

The cathode process in the ...

impure when HBF4 was low and that Cr was not deposited from solutions containing < 0.3 moles $Cr(BF_4)_3$/l and when D_k > 5 amp/dm^2. Optimum results were obtained with an electrolyte containing 1.2 - 1.5 moles Cr $(BF_4)_3$, 0.15 - 0.3 moles $Fe(BF_4)_2$ and 2 moles HBF_4 per liter, at 40°C, with D_k equal to 30 amp/dm^2. The current efficiency was 20% and the alloy (~35% Cr) was bright for thicknesses up to 10 ... but brittle. The Cr content of the alloy increased when D_k was increased and the temperature was lowered, but the current efficiency of Fe was practically independent of temperature and D_k. The results are discussed and explained in terms of polarization curves plotted for the several processes taking place. There are 7 figures, 1 table and 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: Fyseya and Sasaki, Trans. Amer. Electrochem. Soc., 59, no. 23, 445, (1931); Snavely, Faust and Brinde, US Pat. 2,693,444 (1954); McGrow, Gurclis, Faust and Brinde, J. Electrochem. Soc. 4, (1954).

Card 2/2

MEL'NIKOVA, M.M.; SMIRNOV, I.P.; LUKASHINA, N.D., kand. tekhn. nauk; MIKHAYLOV, V.V., kand. khim. nauk, red.

[English-Russian dictionary on electrochemistry and corrosion] Anglo-russkii slovar' po elektrokhimii i korrozii. Pod red. V.V.Mikhailova. Moskva, Proizvodstvenno-izdatel'skiy kombinat VINITI, 1963. 233 p. (MIRA 16:5)
(English language--Dictionaries--Russian)
(Corrosion and anticorrosives--Dictionaries)
(Electrochemistry--Dictionaries)

TEMKINA, Berta Yakovlevna; MEL'NIKOVA, Marina Mikhaylovna; MIKHAYLOV, Nikolay Ivanovich; ZHUKOVA, V.I., red.

[Production and use of electroplates from rare metals and their alloys] Poluchenie i primenenie gal'vanicheskikh pokrytii redkimi metallami i ikh splavami. Leningrad, 1964. 27 p. (MIRA 18:3)

BONDAR', V.V.; MEL'NIKOVA, M.M.; POLUKAROV, Yu.M.

Electrodeposition of hard magnetic alloys; preliminary report.
NTI no.1:28 '64. (MIRA 17:3)

L 32905-65 EWT(m)/EPA(s)-2/EWA(d)/EWP(t)/EPA(bb)-2/EWP(b) Pad/Pt-10 IJP(c) JD/HW/GS

ACCESSION NR: AT5004145 S/0000/64/000/000/0117/0123

36
B

AUTHOR: Bondar', V.V.; Mel'nikova, M.M.; Polukarov, Yu. M.

TITLE: Electrodeposition of magnetically-hard alloys. Part I. Electrodeposition of a cobalt-phosphorus alloy

SOURCE: AN SSSR. Institut nauchnoy informatsii. Informatsionnyye sistemy (Information systems). Moscow, 1964, 117-123

TOPIC TAGS: magnetic memory, magnetically hard alloy, alloy magnetic property, alloy electrodeposition, cobalt alloy, phosphorus containing alloy

ABSTRACT: The authors call attention to the interest centering on the development of miniaturized machine memories using thin magnetic films for high-density information storage and to the use of electrodeposited ferromagnetic alloys for these purposes. The magnetic coverings used in information storage must possess a high coercive force (better than 500 oersteds), residual induction and orthagonality factor; that is $B_r/B_m \geq 0.5$. The work reported on in this article was carried out in the Laboratoriya elektromodelirovaniya (Electrosimulation laboratory) of VINITI for the purpose of determining and investigating the properties of magnetically-hard alloys employed in the recording stage of the overall information-storage problem. Of the different alloys presently in use as carriers of

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recorded informations, the authors focused their attention in particular on the study of the magnetic characteristics of Co-P alloys, since, according to the structural diagram, at specific compositions one can expect the electrodeposition of heterogeneous alloys possessing a high coercive force. The purpose of the present work was to investigate the effect of the conditions of the deposition and the composition of the electrolyte on the composition, quality, structure, magnetic properties and current efficiency of the Co-P alloy. The tests were conducted in glass electrolyzers of 0.5-1 liter capacity, with a thermostat used in high-temperature work. The pH of the electrolyte was checked by a glass electrode and an LP-58 potentiometer. The magnetic properties were determined through the use of a device not described in this article, while current efficiency values were verified by means of a copper coulomb-meter. Polarization measurements were made in a special thermostatically-controlled cell, and the electrodes were subjected to preliminary purification by activated carbon and low-density current. Other test procedures and a concise description of the methodology employed in the preliminary investigations are outlined in the article. The buffer properties of the electrolyte are discussed in a separate section. The results, presented primarily in graph form, indicate the following basic conclusions: 1. the coercive force of pure electrolytic cobalt increases somewhat as the cobalt concentration in the solution increases and then shows no further change; 2. the pH

of the solution has the most marked effect on the magnetic properties of the depositions, with an increase in pH above 3-4 resulting in low precipitate quality; 3. the temperature of the solution also has a considerable influence on the magnetic properties of the depositions, with maximum coercive force achieved at temperatures of 25-40 C; 4. as the current density is increased, the coercive force passes through a maximum, shifting toward lower densities as the temperature is lowered; optimal current densities are: 2.5 amp/dm^2 for 20 C and 5-10 amp/dm^2 for 40 C; 5. for the electrodeposition of a Co-P alloy possessing a coercive force of 600-800 oersteds and an orthagonality factor of 0.55-0.6, an electrolyte of the following composition is recommended: $CoCl_2 \cdot 6H_2O$ 200-400 g/liter; $NH_4H_2PO_2$ 25-100 g/liter; Trilon B 10-15 g/liter, pH 1.8-2; temperature 20-40 C, current density 2.5-5 amp/dm^2. Orig. art. has: 7 figures.

ASSOCIATION: none

SUBMITTED: 08Oct64 ENCL: 00 SUB CODE: MM, DP

NO REF SOV: 007 OTHER: 004

L 32904-65 EWT(m)/EPA(s)-2/EWP(t)/EPA(bb)-2/EWP(b) Pad/Pt-10 IJP(c)
JD/HW/GS

ACCESSION NR: AT5004146 S/0000/64/000/000/0124/0127

AUTHOR: Bondar', V.V.; Mel'nikova, M. M.; Polukarov, Yu. M. 37

TITLE: Electrodeposition of magnetically-hard alloys. Part II. Electrodeposition of cobalt-nickel-phosphorus and cobalt-maganese-phosphorus alloys 18

SOURCE: AN SSSR. Institut nauchnoy informatsii. Informatsionnyye sistemy (Information systems). Moscow, 1964, 124-127

TOPIC TAGS: magnetic memory, magnetically hard alloy, alloy electrodeposition, cobalt alloy, nickel alloy, phosphorus containing alloy, manganese alloy, alloy magnetic property

ABSTRACT: For the purpose of expanding the assortment of alloys which may be used in information recording (computer storage applications), and also of developing electrolytes to operate in a wider pH interval, the authors studied the effect of nickel and manganese ions on the electrodeposition of a Co - P alloy. A number of bibliographical references (most of them American) are cited in a discussion of the magnetic properties of Co - Ni alloys obtained by the electrodeposition method. The authors call attention to the fact that Co-Ni-P alloys, chemically obtained, possess a coercive force of 4-14 oersteds and contain about 5% P

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ACCESSION NR: AT5004146

and different quantities of nickel and cobalt (these alloys have been used in the manufacture of memory elements in high-speed computers). An investigation was made of the conditions for the electrodeposition of Co-Ni-P and Co-Mn-P alloys, and the effect of different factors on the magnetic properties and composition of the alloys was studied. For the electrodeposition of a Co-Ni-P alloy having a coercive force of 1000-14000 oersteds and a rectangularity factor of 0.7, an electrolyte of the following composition is recommended:

$CoCl_2 \cdot 6H_2O$ 100-200 g/l;

$NiCl_2 \cdot 6H_2O$ 140 g/l;

$NH_4H_2PO_2$ or NaH_2PO_2 25-100 g/l.

The pH of the electrolyte is 2.5-3, the temperature is 40C. For the electrodeposition of a Co-Mn-P alloy having a coercive force of 500-900 oersteds, residual inductance of 6000-9000 gauss and rectangularity factor of 0.65-0.85, the following electrolyte is recommended:

$CoCl_2 \cdot 6H_2O$ or $CoSO_4 \cdot 7H_2O$ 200-400 g/l;

$MnCl_2 \cdot 4H_2O$ or $MnSO_4 \cdot 4H_2O$ 20-30 g/l;

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$NH_4H_2PO_2$ or NaH_2PO_2 25-50 g/l.

As a buffer admixture 10 g/l Trilon B may be added to the electrolyte, the deposition of the alloy occurring at a temperature of 18-40 C, pH 1.8-5. The current efficiency of the alloy is about 100% (cobalt anodes). Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 080ct64 ENCL: 00 SUB CODE: MM, DP

NO REF SOV: 006 OTHER: 008

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L 38298-65 EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t) Pad IJP(c) JD/HW

ACCESSION NR: AP5011516 UR/0286/64/000/023/0070/0070

AUTHOR: Polukarov, Yu. M.; Mel'nikova, M. M.; Bondar', V. V.; Botova, V. P. 25 B

TITLE: Electrodeposition of Ni-Co alloy. Class 48, No. 166870

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1964, 70

TOPIC TAGS: nickel alloy, cobalt alloy, electroplating, metal property

Abstract: The electrodeposition of a Ni-Co alloy for the purpose of improving physical and mechanical properties is done in an electrolyte containing:

Ingredient	g/l
Nickel chloride	140
Cobalt chloride	140
Ammonium hypophosphate	100
Trilon B	10

at 40 C and D_c = 10 a/dm^2.

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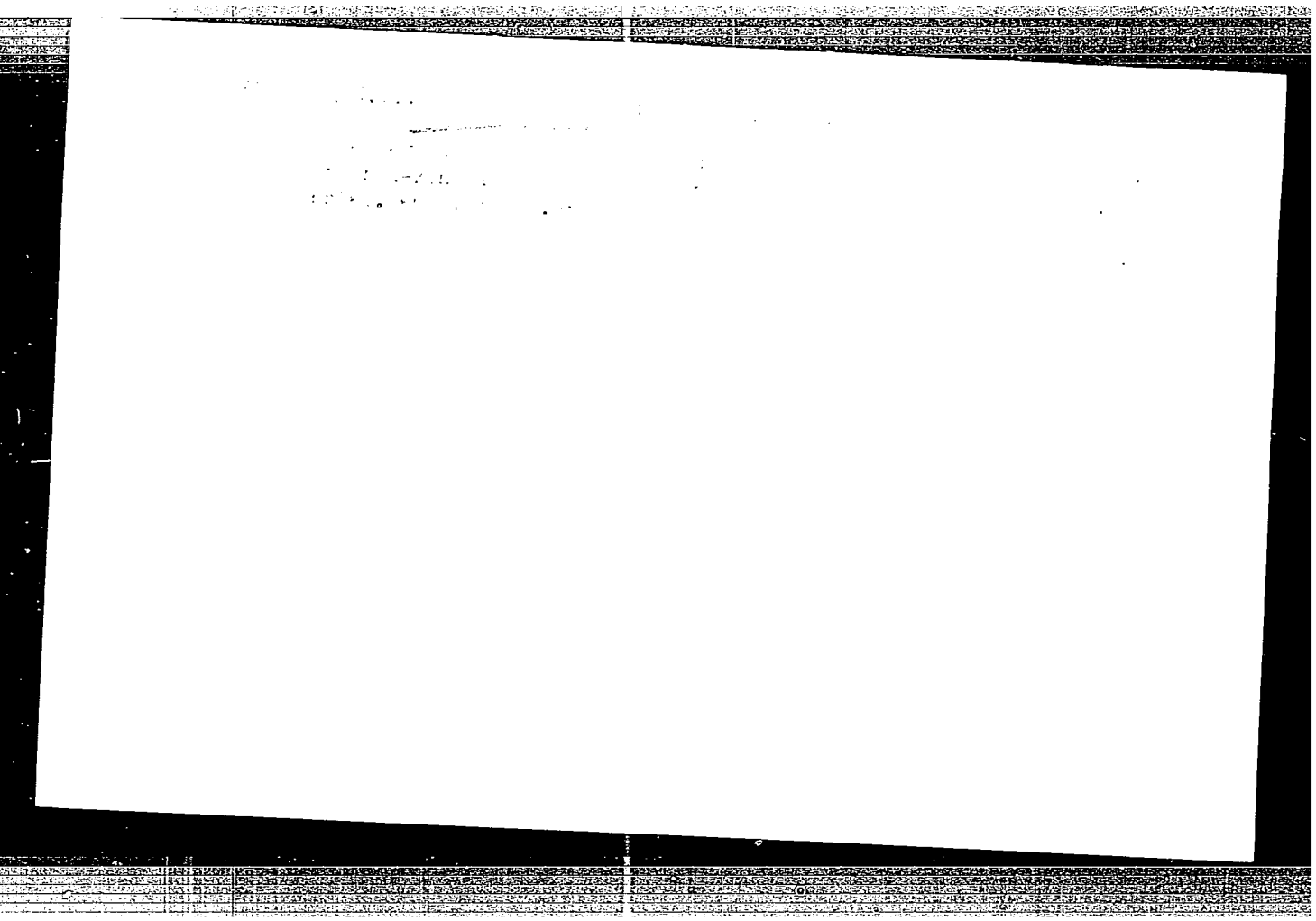

L 38967-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) JD

ACCESSION NR: AP5008570 S/0286/65/000/006/0101/0101

21
B

AUTHORS: Bondar', V. V.; Polukarov, Yu. M.; Mel'nikova, M. M.

TITLE: A method for electrolytic deposition of a magnetic ternary alloy. Class 48, No. 169371 16 18 18

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 101

TOPIC TAGS: electrolysis, magnetic alloy, cobalt, phosphorus, manganese, ammonium compound, sodium compound / Trilon B 27

ABSTRACT: This Author Certificate presents a method for electrolytic deposition of a magnetic ternary alloy containing cobalt and phosphorus. To obtain films of alloy cobalt-manganese-phosphorus, the process is conducted at a temperature of 18-40C, with current density of 1-10 amp/dm^2, and a pH of 1.8-5. The electrolyte contains sulfuric acid or chlorine salts of cobalt (200-300 g/liter), of manganese (20-40 g/liter), ammonium hypophosphate or sodium hypophosphate (35-50 g/liter), and Trilon B (10 g/liter).

ASSOCIATION: none

SUBMITTED: 17Jul63 ENCL: 00 SUB CODE: GC

NO REF SOV: 000 OTHER: 000

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L 3588-66 EWT(m)/EWP(i)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/MW
ACCESSION NR: AP5022661 UR/0365/65/001/005/0534/0538
621.357.7

AUTHOR: Bondar', V. V.; Mel'nikova, M. M.; Polukarov, Yu. M.

TITLE: Electrodeposition of hard magnetic Co-Mn-P alloys

SOURCE: Zaschita metallov, v. 1, no. 5, 1965, 534-538

TOPIC TAGS: cobalt alloy, manganese containing alloy, phosphorus cont... alloy, magnetic alloy, alloy electrolytic deposition, electrolyte com... alloy film magnetic property

ABSTRACT: Experiments have been made to determine the optimum conditions for electrodeposition of thin films of Co-Mn-P alloy with high magnetic properties. Copper rods or foil, or phosphorous bronze foil with an area of 4 cm^2, were used as cathodes, cobalt or platinum were used as anodes, and the electrolyte temperature was varied from 20, 40, and 60C, electrolyte acidity (pH) from 1.1 to 4.8, and current density from 0.5 to 5 a/dm^2. The best electrolytically deposited Co-Mn-P films — about 10-μ thick, with a saturation induction B_m of (8—11) x 10^3 gs, a residual induction B_r of (6—7) x 10^3 gs, a coercive force H_c of 800—6000C and a hysteresis-loop rectangularity factor B_r/B_m ranging from 0.65 to 0.85 — were obtained with an electrolyte containing 200 g/l $CoCl_2 \cdot 6H_2O$, 25 g/l $MnCl_2 \cdot 4H_2O$,

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ACCESSION NR: AP5022661

25 g/l $NH_4H_2PO_2 \cdot H_2O$, and 10 g/l Trilon "B"; the electrolysis conditions were: pH 1.8—4.8, temperature 15—50C, and cathode current density 2.5—1.5 a/dm^2. A unique feature of the electrolyte is the wide pH range in which deposits with high magnetic and decorative properties are obtained. Orig. art. has: 4 figures and 3 tables.
[MS]

ASSOCIATION: Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii Akademii nauk SSSR (All-Union Institute of Scientific and Technical Information, Academy of Sciences, SSSR); Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 20Jan65 ENCL: 00 SUB CODE: MM,GC

NO REF SOV: 010 OTHER: 005 ATD PRESS: 4116

Card 2/2

L 16092-66 EWT(m)/T/EWP(t) IJP(c) JD/HW

ACC NR: AP5022660 SOURCE CODE: UR/0365/65/001/005/0530/0533

AUTHOR: Bondar', V. V.; Mel'nikova, M. M.

ORG: All-Union Institute of Scientific and Technical Information, AN SSSR (Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii AN SSSR)

TITLE: Electrodeposition of cobalt-phosphorus alloy

SOURCE: Zashchita metallov, v. 1, no. 5, 1965, 530-533

TOPIC TAGS: electroplating, cobalt base alloy, phosphorus alloy

ABSTRACT: The mechanism of inclusion of phosphorus into cobalt-phosphorus alloy is not clearly explained in the literature, in spite of the large practical significance of the alloy. This work is a contribution to the solution of the problem. The Co - P alloy was prepared by deposition from an electrolyte containing 200 g/l of cobalt chloride and 25 g/l of ammonium hypophosphate in a glass electrolyzer, where the anode (cobalt or platinum plates) and cathode (copper

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ACC NR: AP5022660 2

phosphorous was determined simultaneously in control samples deposited at various pH. The effect of the electrolyte pH on the properties and phase composition of the alloy was investigated and the results tabulated. The coercive force of the alloy decreased and the amount of phosphide phase, having a composition similar to that of Co_2P, increased with an increased content of phosphorus. The phosphide phase did not include all phosphorus. Most of P (75 - 80 %) was in the form of the metastable solid solution of phosphorus in cobalt. The author thanks A. A. Nikiforova and K. M. Gorbunova for advice during the interpretation of results. Orig. art. has: 9 formulas, 2 figures and 2 tables.

SUB CODE: 11,13 SUBM DATE: 10Mar65/ ORIG REF: 005/ OTH REF: 010 010

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ACC NR: AF5022660

rods) were separated by diaphragms. The electrolyte pH was determined by an LP-58 potentiometer. The amount of hydrogen separated on the cathode was collected and measured and the contents of cobalt and phosphorus in the alloy were determined by trilonometric and molybdate methods. The presence of a chemical reaction was determined by comparing the amount of electricity passing through the copper coulometer (Q_{Cu}) with the calculated amount of electricity equivalent to the amounts of precipitated cobalt (Q_{Co}) and phosphorus (Q_P) and liberated hydrogen (Q_{H2}). The equivalent part of chemical reaction (A) in the process was determined from the equation:

$$A = \frac{(Q_{Co} + Q_P + Q_{H_2}) - Q_{Cu}}{Q_{Cu}} \cdot 100\%$$

The chemical reaction of hypophosphate decomposition was proven by these calculations. It was the most probable source of phosphorus in alloy. X-ray diffraction studies did not provide sufficient information on the phase composition of the Co - P alloy. The phosphide phase was separated during preliminary experiments in the form of weakly magnetic orthomagnetic black soot-like powder by dissolving, at room temperature, the Co - P alloy in hydrochloric acid (HCl : H_2O = 1:4). The same method was used in the phase analysis. The total amount of

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KUDRYAVTSEV, N.T.; YARLYKOV, M.M.; MEL'NIKOVA, M.M.

Value of the PH cathode in the layer in electrolytes during electrodeposition of nickel and iron. Zhur. prikl. khim. 38 no.3:545-555 Mr '65. (MIRA 18:11)

1. Submitted March 9, 1963.

L 38173-66 EWT(m)/EWP(t)/ETI IJP(c) JD/HW/JG
ACC NR: AP6021079 (A) SOURCE CODE: UR/0365/66/002/002/0216/0220

AUTHOR: Kudryavtsev, N. T.; Potapov, I. I.; Mel'nikova, M. M. 14 3

ORG: Moscow Chemico-Technological Institute im. D. I. Mendeleyev (Moskovskiy khimiko-tekhnologicheskiy institut)

TITLE: Analysis of the electrolytic deposition of a Co-Cr alloy

SOURCE: Zashchita metallov, v. 2, no. 2, 1966, 216-220

TOPIC TAGS: electroplating, cobalt, chromium, optimum process, magnetic property, temperature dependence, current density, alloying, METAL COATING, ELECTROLYTIC DEPOSITION

ABSTRACT: The Cr content of Co-Cr alloy coatings, % electric current yield, coercive force, inductive saturation, residual inductance and coefficient of orthogonality were measured as functions of electrolyte composition, pH, temperature and current density in solutions of Cr- and Co sulfates + amino acetic acid. The conditions for obtaining good coatings of Co-Cr alloys (5-15% Cr) are given. It was established that some of the factors contributing to changes in the composition of the alloy also affect the magnetic properties. Additions of cobalt sulfate ranging from 0.25 to 1.0 g-equiv/l lowered the Cr and increased the Co content of the coatings. The electric current yield increased from 10 to 33% at 6 a/dm^2 and from 18 to 41% at 10 a/dm^2 for the same cobalt sulfate changes. Above 10 a/dm^2 the quality of the coatings was poor.

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ACC NR: AP6021079

By increasing the temperature from 20 to 50°C, the % yield rose and the quality of the coatings improved, although the Cr content decreased from 10 to 3%. The lowering of pH from 2.5 to 1.5 dropped both the % yield and the Cr content. Alloy coatings, obtained under optimum electrolyzing conditions, had a low coercive force (20-50 oe) and a residual inductance of 5000-6000 gs. With increases in current density from 2 to 10 a/dm^2 and pH from 1.5 to 2.5 the coercive force dropped as a result of the increase in Cr content. At pH=2 the coefficient of orthogonality went through a maximum but increased with current density. The orthogonality of the hysteresis loop improved with increase in temperature from 20 to 50°C, while the coercive force went through a maximum at 40°C, probably due to a phase transformation in the coating. Orig. art. has: 7 figures.

SUB CODE: 11,14/ SUBM DATE: 22Jul65/ ORIG REF: 011/ OTH REF: 001

Card 2/2 vmb

MEL'NIKOVA, M.M., assistent

Clinical use of hyaluronidase preparations. Zdrav. Turk. 4 no. 2:39-41 Mr-Ap '60. (MIRA 13:10)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Preysman) Turkmenskogo gosudarstvennogo meditsinskogo instituta im. I.V. Stalina.

(HYALURONIDASE)

MEL'NIKOVA, M.M., assistent

Treatment of inflammatory diseases of the uterus and the adnexa uteri with rhonidase electrophoresis. Zdrav. Turk. 4 no.4:3-8 Jl-Ag '60. (MIRA 13:9)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.G. Preysman) Turkmenskogo gosudarstvennogo meditsinskogo instituta im. I.V.Stalina.
(HYALURONIDASE—THERAPEUTIC USE) (ELECTROPHORESIS)
(UTERUS—DISEASES)